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Shionogi Submits Supplemental New Drug Application for Ensitrelvir in Japan for the Post-Exposure Prophylaxis of COVID-19.

OSAKA, Japan, March 27, 2025 – Shionogi & Co., Ltd. (Head Office: Osaka, Japan; Chief Executive Officer: Isao Teshirogi, Ph.D.; hereafter "Shionogi") submitted today supplemental New Drug Application (sNDA) in Japan for its investigational, oral antiviral ensitrelvir (Generic name: ensitrelvir fumaric acid, Code No.: S-217622, hereafter "ensitrelvir") for post-exposure prophylaxis of COVID-19. The sNDA is based on the positive results from the Global Phase 3 Study, **S**topping **CO**VID-19 p**R**ogression with early **P**rotease **I**nhibit**O**r treatment – **P**ost-**E**xposure **P**rophylaxis (SCORPIO-PEP) [1, 2].

COVID-19 remains a public health threat, with the disease exhibiting a high degree of risk as reflected by hospitalizations roughly six times that of influenza, and deaths approximately fifteen times higher in Japan. Vaccination is said to be the basis for preventing COVID-19[3]. Nonetheless, with continually decreasing vaccination rates, waning immunity after vaccination, and the potential for new variants to emerge, it is challenging to fully prevent viral infection, symptom onset, or the severity of COVID-19 through vaccination alone. Therefore, post-exposure prophylaxis with timely use of an oral antiviral would be a valuable way to help prevent COVID-19 illness in people who have been exposed.

If this application is approved, ensitrelvir is expected to be the first orally-administered option for the post-exposure prophylaxis of COVID-19.

Ensitrelvir, known as Xocova® in countries where it is approved, received emergency regulatory approval in Japan in November 2022 and full approval in March 2024 for the treatment of COVID-19. It became available in Singapore via a Special Access Route application in 2023, and it is currently under regulatory review in Taiwan. Ensitrelvir was granted Fast Track designation by the FDA in 2025 for post-exposure prophylaxis of COVID-19 following contact with an individual who has COVID-19 and was granted Fast Track designation by the FDA in 2023 for the treatment of COVID-19. Ensitrelvir is an investigational drug outside of Japan and Singapore. In addition, the brand name Xocova® has not been approved for use outside of Japan and Singapore and pertains only to the approved drug in Japan and Singapore.

About ensitrelvir

Ensitrelvir is a 3CL protease inhibitor created through joint research between Hokkaido University and Shionogi. SARS-CoV-2 has an enzyme called 3CL protease, which is essential for the replication of the virus[4]. Ensitrelvir suppresses the replication of SARS-CoV-2 by selectively inhibiting the 3CL protease[4].

Shionogi evaluated the safety and efficacy of ensitrelvir through SCORPIO-SR, a Phase 3 study conducted in Asia, during the Omicron-dominant phase of the epidemic[5]. In this study, ensitrelvir showed both clinical symptomatic efficacy (symptom resolution sustained for at least 24 hours) for five typical Omicron-related symptoms (primary endpoint) and antiviral efficacy (key secondary endpoint) in a predominantly vaccinated population of patients with mild-to-moderate SARS-CoV-2 infection, regardless of risk factors[5]. Regarding safety, most adverse events were mild in severity and no deaths were seen in the study[5]. Among the most common treatment-related adverse events were temporary decreases in high-density lipoprotein and increased

blood triglycerides, as observed in previous studies[5]. The data from this study were published in JAMA Network Open.

Additionally, the Phase 3 SCORPIO-HR study assessed ensitrelvir in a broad range of symptomatic, non-hospitalized participants with COVID-19, regardless of past SARS-CoV-2 infection. The study did not meet its primary endpoint of a statistically significant reduction in time to sustained resolution (symptom resolution sustained for at least 48 hours) of 15 common COVID-19 related symptoms for once-daily ensitrelvir compared to placebo[8]. No new safety concerns were identified in the study, and treatment with ensitrelvir was well tolerated, with a similar adverse event profile as placebo[6].

Shionogi recently announced that its global, double-blind, randomized, placebo-controlled Phase 3 study (SCORPIO-PEP) assessing ensitrelvir as oral post-exposure prophylaxis met the primary endpoint of preventing COVID-19[1]. SCORPIO-PEP is the first and only Phase 3 study of a COVID-19 oral antiviral as a post-exposure prophylaxis to meet the primary endpoint of preventing COVID-19.*

SCORPIO-PEP assessed 2,387 study participants aged 12 years and older with a negative screening test for SARS-CoV-2 infection and no symptoms at the time of enrollment, who were exposed to a person living in their household with symptomatic COVID-19. Study participants were randomly assigned in a 1:1 ratio to receive ensitrelvir (125 mg) or placebo, once daily, and began treatment within three days of when the household member with COVID-19 began showing symptoms. Participants then continued ensitrelvir or placebo for five days. Overall, ensitrelvir was generally well tolerated, with similar rates of adverse events in the ensitrelvir group and the placebo group (15.1% and 15.5%, respectively) [1]. There were no COVID-19 related hospitalizations or deaths.

An investigator-initiated research study with ensitrelvir is ongoing in hospitalized patients for the management of COVID-19 as part of the Strategies and Treatments for Respiratory Infections & Viral Emergencies (STRIVE) platform protocol. STRIVE was developed under the auspices of NIH's Accelerating COVID-19 Therapeutic Interventions and Vaccines (ACTIV) public-private partnership.

Shionogi also recently released preliminary results from a multicenter, randomized, double-blind, placebo-controlled trial of ensitrelvir in mild to moderate COVID-19 patients aged 6 to under 12 years in Japan. The study confirmed safety and tolerability and found the pharmacokinetics of ensitrelvir in this age group similar to adults[7].

Forward-Looking Statements

This announcement contains forward-looking statements. These statements are based on expectations in light of the information currently available, assumptions that are subject to risks and uncertainties which could cause actual results to differ materially from these statements. Risks and uncertainties include general domestic and international economic conditions such as general industry and market conditions, and changes of interest rate and currency exchange rate. These risks and uncertainties particularly apply with respect to product-related forward-looking statements. Product risks and uncertainties include, but are not limited to, completion and discontinuation of clinical trials; obtaining regulatory approvals; claims and concerns about product safety and efficacy; technological advances; adverse outcome of important litigation; domestic and foreign healthcare reforms and changes of laws and regulations. Also for existing products, there are manufacturing and marketing risks, which include, but are not limited to, inability to build production capacity to meet demand, lack of availability of raw materials and entry of competitive products. The company disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise.

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* Literature search conducted December 2024.

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